

NIH Grant writing mechanics

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NIH mechanisms

- *RO3: generally two years; limited budget.
- Supports development of research line that should lead to RO1
- Ideal “starter grant” for new investigators.
- no pilot data needed

- R21: two year limited budget
- “high risk/high yield”.
- supports innovative work with potential to impact many areas.
- Pilot data a plus but limited expectations.

- RO1: Major investigator-initiated mechanism. Five year limit.
- Pilot data is important.
- New investigator status is weighted **but** proposal needs clear theoretical/clinical relevance, solid methods, and clear analysis plans.

- K-Award: ideal mechanism for young researchers to develop new skill sets.
- Needs both clear training plan and scientific excellence.
- Multi-discipline and multi-site are pluses.

Getting started

- * get copies of successful proposals (as many as possible)!
- Identify multiple readers and use them! (some with content area expertise, methodological/ stats expertise, and grant writing skills)
- Leave plenty of time for revisions.
- Regular team meetings to refine and revise.

Theoretical relevance

- Theoretical framework, if put forward must deliver:
- Clear explicit hypotheses with discussion of how design and possible outcomes go to confirmation/disconfirmation; consider alternative theories or models .

Clinical relevance

- If clinical sample is included:
- Clear up to date literature review on the clinical issues with focus on how outcomes inform clinical theory or practice.
- **Not an “add-on”**
- Thorough battery to insure matching.
- Consider treatment as experiment.
- Include measures, when possible, where clinical sample should be comparable to controls.

The Proposal

- Aims should meet the “grandmother” criterion.
- Background and significance: clear, succinct, up to date in references, link each section to the methods that follow.
- Pilot data: detailed as in MS; connect to the following methods section (be telegraphic).
- Methods: reviewer should be able to do the study; stats must be clear, alternative outcomes and implications a plus.
- Do not ignore human subjects issues.
- Do not rely on appendices for anything other than background materials.

Revisions

- DO NOT GIVE UP!!
- “unscored” is not necessarily “kiss of death”
- Be responsive to reviews. Justify those criticisms or suggestions that you do not accept.
- Positive tone.
- Look for common criticisms across three reviews.

Additional thoughts

- Inter-disciplinary work is valued but need to find common language and real involvement from each discipline in the writing.
- Longitudinal designs are valued.
- Analyses that are dynamic and go beyond simple significance testing is valued.
- Neuroimaging, genetics, etc., must pass the “value added” test. No points just for having these anymore.